

The 2050 energy and climate challenges DECARBONISE, DECENTRALISE, DIGITALISE

While the Clean Energy Package is paving the way for an ambitious trajectory towards 2050 targets, the European Green Deal needs to kickstart the realisation of full decarbonisation throughout all EU policy frameworks.

The energy transition needs additional incentives for making it real, including at local level, through sectoral integration and by maximising the potential of local resources. A roadmap with intermediate steps in 2030 and 2040 is needed to create visibility for investors, big and small, private and public. In respect for future generations, the ambitions must be set high to ensure that the mission becomes possible.



Decentralised is the new normal

LOCAL AND DIGITAL, CLOSE TO CITIZENS AND CUSTOMERS

Technological developments and digitalisation go hand in hand to unlock the potential of local sustainable resources. Bringing the options close to citizens will contribute to the involvement of local communities in the energy transition.

Local energy companies have since their existence guaranteed this local 'connection'. As the technology now can go local, the need for additional contested large-scale infrastructures will be reduced, if the right policy choices are made. Concepts should be shared, choices can be made locally. In a rapidly decentralising energy system, the DSO becomes an active system manager in close cooperation with the TSO and acts as market facilitator, including for flexibility. Their contribution to storage and alternative fuel charging infrastructures should be reconsidered.

The development of Citizens Energy Communities requires an adequate balance between their aspirations and the integrity of the existing grids.

Make sectoral integration happen - locally

LINKING ELECTRICITY WITH GAS, HEAT AND TRANSPORT

Stop silo-thinking: sectoral integration and sector coupling are essential elements in any cost-efficient and energy-efficient strategy to respect the Paris Agreement.

They contribute to the necessary flexibility in an energy system with a steeply rising share of variable renewable energy sources and increased energy efficiency.

An integrated approach – within the energy sector and between energy and other sectors (heating & cooling, transport, building) - combined with elements of circular economy, offer an effective and cost-efficient answer to maximise the potential of local renewable resources, close to the customer. Local, integrated energy companies demonstrate that this potential can be realised – if the right incentives are in place.

From natural gas to renewable and decarbonised gases

REALISING THE POTENTIAL

On the road to full decarbonisation, gases will continue to play a key role to decrease CO2 emissions gradually (amongst others by switching from coal and fuel to natural gas), as an essential contributor to seasonal energy storage and for the long-distance transmission of large quantities of energy.

Natural gas is currently a major source for heating and for centralised and decentralised electricity generation, with an increasing role in transport. Through the right regulatory incentives, producers, infrastructure providers and the appliances industry will need to incorporate the potential of renewable and decarbonised gases in fast track.

Existing gas transport and distribution infrastructure are readily available for storage and transport of energy, as well as for the connection and distribution of decentralised renewable and decarbonised gas sources.

Sustainable financing

TRANSFORMING ENERGY INFRASTRUCTURES

European legislation on sustainable financing will orient investors towards sustainable energy infrastructures and projects, through the establishment of sustainability criteria.

The choice of these criteria will directly and indirectly affect the financing costs of any future project in the European energy sector.

Technology neutrality will have to be ensured to allow different technologies and different energy vectors to contribute in different degrees - sustainable, enabling or transitional - to the required CO2 reduction.

The digital energy (r)evolution

OPPORTUNITIES AND CHALLENGES FOR THE INDUSTRY AND STAKEHOLDERS

Intelligent grids, communicating meters, platform revolutions, energy communities, data accessibility, cybersecurity, customer consent.

Digitalisation will create opportunities for innovation and higher efficiency in every part of the value chain, for companies and citizens. Increasingly interconnected energy systems will equally bring challenges, for cybersecurity and data protection in a digital habitat where DSOs act as neutral market facilitator, making data available in a transparent and secure way.

New actors will enter the market and offer innovative energy products and services, implying a need for clarity on rights and obligations for the industry and stakeholders.

A just and inclusive transition

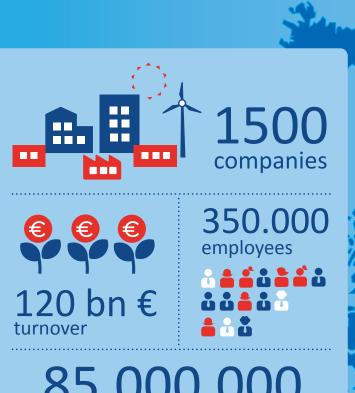
GETTING ALL ON BOARD

Regions and citizens start the transition journey with a different inheritance: getting and keeping all on board must be an evident goal for the Energy Union.

A just transition ensures that all regions – with a different energy history and diverging potential for sustainable solutions – are supported in their necessary efforts to work towards a sustainable future.

An inclusive transition ensures that all citizens – independent of their personal capacities – and all companies – independent of their size - have the possibility to develop, work and live in a sustainable environment, contributing according to their possibilities.





85.000.000 customers



- All member companies are owned by **local shareholders**, close to **citizens and customers**
- Ensuring **security of supply** in every part of the energy value chain in **critical infrastructures** and **essential services**
- Developing locally anchored **investments and jobs**, with a **visionary contribution** to an integrated energy and climate policy.

Respect the balance between European solutions and subsidiarity

The Clean Energy Package has reviewed all strategic lines in the existing EU legislation on energy.

Its implementation should now respect the spirit of the agreements between Commission, Parliament and Member States.

New designs have been agreed, new lines have been drawn, new concepts have been developed. Taking into account the large diversity between Member States, in types of economic actors, market dynamics, renewables potential and energy mix, the balance that was found between European solutions and subsidiarity must be respected to ensure effective and efficient answers to the unprecedented challenges ahead.

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